

In the Claims

Please amend claim 18 as indicated below.

1-17. (Withdrawn)

18. (Currently amended): A system for forming a coating on a surface of a semiconductor wafer in a CVD arrangement, the system comprising:

A¹ injector means for supplying a uniform supply of gas to the surface of the wafer, the surface being in a zone of the CVD arrangement that exhibits a depleted gas supply absent the injector means; and

means for using the supplied gas in combination with selected reactants to deposit a coating on the wafer.

19. (Original): A method for forming a coating on a surface of a semiconductor wafer in a CVD arrangement, the method comprising:

A² supplying gas to the surface of the wafer using a gas injector adapted to maintain uniform supply of the gas in a zone of the CVD arrangement that would exhibit a depleted gas supply absent the injector; and

using the supplied gas in combination with selected reactants and depositing a coating on the wafer.

20. (Original): The method of claim 19, wherein supplying gas to the surface includes supplying gas in different quantities to different zones of the CVD arrangement.

21. (Original): The method of claim 20, wherein the different quantities are selected to compensate for a gas depletion rate associated with the selected zone of the CVD arrangement to which the injector supplies gas.

22. (Original): The method of claim 19, wherein the gas includes at least one of: ammonia and dichlorosilane.

23. (Original): The method of claim 19, wherein depositing a coating on the wafer includes depositing an anti-reflective coating having uniform optical properties.

24. (Original): The method of claim 23, wherein the anti-reflective coating is deposited having a k value of refractive index that is between about 0.6 and 0.8.

25. (Original): The method of claim 23, further comprising performing photolithography on the wafer using the anti-reflective coating.

26. (Original): The method of claim 19, wherein depositing a coating on the wafer includes depositing a coating having uniform thickness.

27. (Original): The method of claim 19, further comprising adjusting the gas injector to maintain the uniform gas supply.

28. (Original): The method of claim 27, wherein adjusting the gas injector comprises: providing at least one gas concentration detector in the CVD arrangement; detecting the concentration of the supplied gas using the detector; and in response to the detected concentration, adjusting the gas injector.

29. (Original): The method of claim 28, prior to depositing a coating on the wafer, further comprising removing the at least one gas concentration detector from the CVD arrangement after detecting the concentration of the supplied gas.

30. (Original): The method of claim 29, wherein detecting the concentration of the supplied gas using the detector includes operating the CVD arrangement under simulated processing conditions.